## AUTHORS' INDEX.

A.	PA	GE	В. РА	AGE
Adams (H.) on Standardi A German Corresponden		46	Barrett (Prof. W. F.) on Methods of	
operation between	Competi-	32		776
Development of C	aslighting	43	Barrows (W. E.) Electrical Illumina- ing Engineering (Review)	503
An Engineering Correspond A Study of the E	ondent on	10	Wireless Telegraphy Operators	490
Possibilities of Li by Means of Carbon	ghting by		Biscan (Prof. W.) on Decorative	631
	5, 103, 177, 2	08 18	Bloch (Dr. L.) on The Simple Ex- planation of Fundamental	
Colliery Illumination Development of Gas.	6	889	Photometrical Terms 516, Sand-blast Analogy of Distri-	682
Berlin (The) Illumination of Chur	7	43	bution of Light (Correspon-	783
	7, 209, 280, 3	347 335	Blondel (Prof. A.) on the Blondel- Krüss Mesophotometer or	
Lighting of the House ment and the Palac	e of Parlia-		Integrating Photometer Name for the International	785
minster Lighting of Large	Outdoor	363	Candle Unit Name for the International Unit	524
Areas Inverted Lighting	by Osram	318	Böhm (Dr. C. R.) Some Notes on	784
Lamps Notes of the Historica	al Develop-	84	Incandescent Gaslighting 227, 326, 395,	628
ments of Street I London in the Se	eventeenth		Bohnenstengel (E.) on Konstruk- tionen Elektrischer Bogenlampen	
and Eighteenth Ce Porch Lighting	4	105	(Review)	786
Some Practical Point Design	1	111	C.	
Some Notes on the velopment of Gas	Lighting	110	Cady (F. E.) on The Relation between Candle-power and Voltage of	
in London Some Experiments	on the	316	Different Types of Incandescent	61
Growth and Decay Sensations Use of Silk Shades	:	340	Chalmers (S. D.) on The Formation of the Illuminating Engineering	
Interiors (The) Ashe (S. W.) on the 1	4	173	Society Charitschkoff (Dr. C.) on 'Meteor,'	157
Modern Illumination logical Optics	on Physio-	275	a New Variety of Petroleum for Illuminating Purposes	299
Athos on Daylight II (Correspondence)	lumination	135	The Special Testing of Petro- leum Intended for use with	
Efficiency of Gaslan spondence)	nps (Corre-	124	Incandescent Burners The Connection between the	401
Light Conversations ating Engineering			Flash-point of Petroleum and its qualities as Illuminant	694
Glare Name for the Interna	'	765	Clarke (J. B.) on The Bristol Light-	181
of Light (Correspo Sand-blast Analogy	ndence) '	783	Coblentz (Dr. W. W.) on The Lumin- ous Efficiency of Metallic	
bution of Light, I	The (Corre-	647		557 839

PAGE	PAGE
Cohen (C. M.) on Records of New Business Departments 31	F.
Cox (F. J.) on The Efficiency of Petrol Air Gas Plants (Correspon-	Fleming (Prof. J. A) on The Proposed International Unit of Light
dence) 565	(Discussion) 444
Curtis (A. D.) and Morgan (A. J.) on	Forrest (G. T) on The Lighting of Schools 450
Indirect Illumination 199 Czudnochowski (W. B. von) on	Forshaw (A) on A Comparison be-
the Exhibits at the Berlin Ex-	tween the Illuminating Efficiencies
Naval Architecture 186	of Carbon Monoxide and Hydro- gen when used in Conjunction with
Mavai Architecture 180	the Incandescent Mantle 539 669
D	Fulton (J. B.) on The Illumination of the Church of Santa Sophia,
Darch (J.) on The Art of Shading 83, 173	Constantinople 57
The Formation of the Illuminat- ing Engineering Society 157	Fulweiler (W. H) on The Theory of Flame and Incandescent Mantle
Defries (J.) The Formation of the	Luminosity 409, 553, 703, 769
Illuminating Engineering Society 157 Deville (Sainte Claire) on The	_
Relation Existing between the	G.
Heat of Combustion of a Gas and	Gaster (L) Editorials, 1, 73, 145, 217, 289,
Power 451	361, 433, 505, 577, 649, 721, 793 Exhibition of Experiments on
· Dow (J. S.) on The Formation of	Ultra Violet Light at the
Society 158	Royal Institution 298 Formation of the Illuminating
The Mechanical Equivalent of	Engineering Society 154, 160, 375
The Effect on Visual Acuity of	Institution of Gas Engineers, Remarks at Annual Meeting 456
Light of different Colours 233	Modern Methods of Illumina-
Colour and Visual Acuity	tion—I. Electric Lighting 161 Do. II. Gaslighting 244
(Correspondence) 488 Exhibition of Experiments on	Do. II. Gaslighting 244 Do. III. Oil, Petrol-air, Acety-
Visual Acuity at the Royal	lene, &c 259
The Proposed International Unit	Do. IV. General Problems in Illumination and Illumination
of Light (Discussion) 445	Measurements 300
Remarks on Fused Bifocal Lenses 464	Do. Lecture before the Lon- don Institution 843
The Photometry of Tungsten	Remarks at Inaugural Meeting
Lamps and the Theory of the Flicker Photometer 610	of the Illuminating Engineering Society 807 810
The Theory of the Flicker Photo-	Gaster (Dr. M) on The Worship of
Drysdale (Dr. C. V) on The Pro-	Light
duction and Utilisation of	Light in Custom and Super-
The Proposed International	stition
Unit of Light (Discussion) 445	Petrol Air Gas Plants (Corre-
Dykes (A. H.) on Present Aspects of Electric Lighting 853	spondence) 561 Glover (T), Presidential Address at
* 11.*	Institution of Gas Engineres 454
E.	H.
Eck (J) on The Formation of the	
Illuminating Engineering Society 160 Edeleanu (Dr ) on The Purification	Haldane (Dr. J. S.) on Remarks at the Inaugural Meeting of the
of Roumanian Petroleum 761	Illuminating Engineering Society 809 Handcock (H. W.) on Present
Edgeumbe (K.) on The Formation of the Illuminating Engineering	Aspects of Electric Lighting 853
Society 158	Hare (C. W.) on The Consumer 29
Edridge-Green (Dr. F. W) on The Theory of Vision and Colour Per-	Harrison (Haydn T.) on The Forma- tion of the Illuminating Engineer-
ception 210, 741, 803	
	,

PAGE	PAGE
Hastings (C. W.) on the Formation	Monasch (Dr. B.) on Lux or Meter-
of the Illuminating Engineering	kerze? (Correspondence) 133
Society 159, 160	The Relation between the Units
Hoddle (C.), Presidential Address	of Illumination in Different
delivered before the British	Countries 742
Acetylene Association 549	Mordey (W.) Remarks at the In-
The Efficiency of Petrol Air Gas	augural Meeting of the Illumina-
Plants (Correspondence) 566	ting Engineering Society 809
Holgate (T.) on High Duty Gas	Morrison (A. Cressy) on Better
	Light and Air for Miners 109
Lighting 457, 533, 615	
Hyde (Dr. E. P.), Cady (F. E.), and Middlekauff (G. W.) on The	The Progress of the Gas Industry 120
Middlekauff (G. W.) on The	
Selective Emission of Incan-	N
descent Lamps 241, 335, 389	410 1
The Physical Laboratory of the	Nichols (Dr. E. L., and Merrit, E.)
National Electric Lamp Asso-	
ciation 758	on Phosphorescence and Lumines-
ciation 100	cence 711
•	
I.	
TC /T 387 \ 41 . TZ4' C 41	0.
Ife (J. W.) on the Formation of the	O'Common (TI) and Date I Air Com
Illuminating Engineering Society 160	O'Connor (H.) on Petrol Air Gas
	(Review) 431
J.	Our Berlin Correspondent on the
••	German Tax on Gas and Elec-
Jones (A. Denman) on the Formation	tricity 23
of the Illuminating Engineering Society	Our Boston Correspondent, on The Lighting of the City of Boston 529
Society 159	
_	Our Correspondent in Buda-Pesth,
K.	on The Illumination of the Royal
	Palace in Buda-Pesth 383
Kerr (Dr. J.) on The Eyesight of	Our Paris Correspondent, on The
School Children in the City of	Lighting of Churches by
T 3	
Krüss (Dr. H.) on An Integrating .	The Report of the Conseil d'Hy-
Photometer 710	giene on the Illumination of
	Factories and Workshops 319
L.	The Present State of Metallic
	Filament Lamps 333
Laporte (F.) on A Name for the	Our Special Correspondent in Buda
International Unit of Light (Cor-	Posth on Fires in Theatres and
1	Pesth on Fires in Theatres and
	Electrical Installations 97
Lux (H.) on Tests of 220-volt	Owens (H. T.) on Street Lighting
Metallic Filament Lamps 180	Fixtures and Illuminants 700
М.	
25 1 (25)	P.
Macbeth (N.) on Illuminating	D (D III) TI
Engineering with Gas 771	Parsons (Dr. J. H.) on The Forma-
Mackinney (Val. H.) and Taylor	tion of The Illuminating Engineer-
Mackinney (Val. H.) and Taylor (H. L.) on Geometrical Optics	ing Society 157
(Review) 359	Paterson (C. C.) on The Economical
Marconi (G.) on The Eyesight of	Possibilities of Lighting by
Window Tolomanhar Openators	Carbon Filament Lamps
Wireless Telegraphy Operators	
(Correspondence) 424	
Marks (L. B.) on Factory Lighting 752, 845	The Proposed International
Marshall (A. J.) on Illuminating	Unit of Light 443
Engineering Qualifications	A Name for the International
(Correspondence) 131	Unit of Light (Correspondence) 719
The Internal Lighting of Churches	Penn (A. E.) on The Formation of
(Correspondence) 279	The Illuminating Engineering
Light-tinted Symbols on Dark	Society 157
Light-tinted Symbols on Dark Backgrounds in Printing 406	Society
Light-tinted Symbols on Dark	Society 157 Perrot (E. G.) on Church Lighting 50 Preece (Sir Wm.) on Lux or Meter-

	R.	PAGE	υ.	PAGE
Vote of Thank the Inaugural	verton) Proposal o ks to President a Meeting of the	t e	Ubbelohde (Dr.) on The International Petroleum Commission.	453
Richtmyer (F.	Ingineering Society K.) on Education	n	Y.	
Standpoint	on Arc Lamps and on (continued)	. 851	Voege (Dr. W.) on A Simple Apparatus for the Examination of the Colour and Quality of Radiation furnished by Artificial Sources of Light	10
Satori (K ) on N	S. Iodern Glowlamp		Need we Fear the Effects of the Ultra Violet Constituent in	10
and their Prod Solomon (M.) on	uction 38	84, 479	the Light from Modern Illuminants on the Eye? (Correspondence)	205
Carbon Fil (Correspon Electric Lam	dence)	s . 281 . 359	The Protection of the Eye from Ultra Violet Light Von Benesch (E. L.) on Methods of	543
of Churches (Co Strache (Prof. H.)	orrespondence)	136	Illumination from the Middle Ages up to the Commencement of the Nineteenth Century (Review)	600
Incandesce The Efficience	nt Gas Lighting y of High Pressure ting (Correspon-	g 329	Voysey (A. A.) on London Electric Supply (Correspondence)	132
dence)		489	w.	
	tometry Structural Difficul-	489 695	Waldram (P. J.) on Daylight Illumi- nation (Correspondence)	64
dence) Modern Phot Strong (J. R.) on S ties in Installat	tometry	489 695 98	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks	64 469
dence) Modern Phot Strong (J. R.) on S	tometry	489 695 98	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society	
dence) Modern Phot Strong (J. R.) on Strong (J.	tometry	489 695 98 786 31	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze? 65 Visual Acuity and Light of	469
dence) Modern Phot Strong (J. R.) on Strong (J.	tometry	489 695 98 786 31	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze? 65 Visual Acuity and Light of Different Colours (Correspondence)	469 809
dence) Modern Phot Strong (J. R.) on Stries in Installat  Taylor (F. H.) of Electric Lightin Thompson (G. W.) Thompson (Prof. Address being Engine Remarks at 1 of the Illum ing Society Trotter (A. P.) on	tometry	489 695 98 786 31 813	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze?	469 809 5, 134
dence) Modern Phot Strong (J. R.) on Strong (J. R.) on Strong (J. R.) on Strong (T. H.) of Electric Lightin Thompson (G. W.) Thompson (Prof. Address being Engine Remarks at 1 of the Illuming Society Trotter (A. P.) on Distribution ment 7, 439,	T.  on Private House (Review) on Model Kitchens S. P.) Inaugural fore the Illuminativering Society Inaugural Meeting inating Engineering Illumination, its n and Measure 79, 151, 223, 295 511, 583, 655, 72	489 695 98 786 31 813 807 5, 367, 7, 799	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze?	469 809 6, 134 345 89 193
dence) Modern Phot Strong (J. R.) on Strong (J. R.) on Strong (J. R.) on Strong (J. R.) on Strong (J. R.) of Electric Lightin Thompson (G. W.) Thompson (Prof. Address being Engine Remarks at 1 of the Illuming Society Trotter (A. P.) on Distribution ment 7, 439, 2 Remarks at 1 of the Ill of the Ill	tometry	489 695 98 786 31 813 807 6, 367, 7, 799	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze? 65 Visual Acuity and Light of Different Colours (Correspondence)	469 809 6, 134 345
dence) Modern Phot Strong (J. R.) on Strong (J. R.) on Strong (J. R.) on Strong (J. R.) on Strong (G. W.) Thompson (G. W.) Thompson (Prof. Address being Engine Remarks at 1 of the Illuming Society Trotter (A. P.) on Distribution ment 7, 439, Remarks at 1 of the Ill neering Soc Trumbull (C. R.)	T.  on Private House (Review) on Model Kitchens S. P.) Inaugural fore the Illuminatering Society inaugural Meeting inating Engineer 11 Illumination, its n and Measure- 79, 151, 223, 295 511, 583, 655, 72 inaugural Meeting uminating Engineer	489 695 98 786 31 813 807 5, 367, 799	Waldram (P. J.) on Daylight Illumination (Correspondence) A Standard for Daylight Illumination in Interiors Walmsley (Prof. R. M.) Remarks at the Inaugural Meeting of the Illuminating Engineering Society Weber (Prof. L.) on Lux or Meterkerze? 65 Visual Acuity and Light of Different Colours (Correspondence) Weinbeer (E. W.) on The Use of Reflectors for the purpose of Modifying Intensity of Illumination Wild (L.) on The Employment of Mirrors in Photometry	469 809 6, 134 345 89 193

## SUBJECT INDEX.

	PAGE	PAGE
Acetylene—	FAGE	Konstruktionen Elektrischer
*		Bogenlampen, by E. Bohnen-
Acetylene Lighting for Navigation	560	stengel (Review) 786
Acetylene Lighting for Rifle		See also "Modern Methods of Electric
Ranges	560	Lighting" for reference to Various
Acetylene Lighting in Turkey	678	Arc Lamps 161
British Acetylene Association		Aerial Warfare, Use of Dazzling
Annual Meeting 394, 448	. 549	Timber 904
Better Light and Air for Miners,	,	Association of Engineers-in-Charge,
by A. Cressy Morrison	109	
Oil, Acetylene, Petrol-Air Gas, and	100	
other Systems of Lighting, by		
L. Gaster (Cantor Lecture de-		Berlin Exhibition of Shipbuilding,
livered before the Royal Society		Exhibits at, by W. B. von
of Arts, March 1st, 1909)	259	Czudnochowski 186
		Berlin Palace of Ice, by An Engi-
The 'Roni' Acetylene Burner	422	neering Correspondent 518
Air in Rooms, Testing of	400	Bowling Alley, Illumination of a 449
Anti-dazzlo Lens, The	496	Cantor Lectures on Illumination,
Architectural and Artistic Aspects of	TII	The 93, 161, 245, 301, 751
mination—	IIIu-	Do. (Editorial) 146
mmation—		Carlighting Engineers, Association of
Beautiful Interiors and Appro-		32, 751
	324	Do. (Editorial) 3
Beautiful Interiors, Position of	021	Central Station and Contractor, Ideal
	399	Relations between 185
Lights in	399	
Decorative Electric Lighting, by	001	Church Lighting-
Prof. W. Biscan (Review)	631	Church Digheing—
Design of Lamp Posts in London,		Churches Illumination of by An
The (Editorial)	650	Churches, Illumination of, by An Engineering Correspondent 37
Electric Light for Decorative Dis-		
play	342	Churches, Internal Lighting of, by
Flames, Use of, for Decorative		G. A. T. Middleton 33
Purposes	57	Do. (Correspondence)
Imitation Candles in Electric		136, 137, 209, 279, 280, 347
Lighting	125	Church Lighting by Acetylene, by
Interior Lighting, Silk Shades in	473	Our Paris Correspondent 53
London's Electric Light Standards	708	Church of Santa Sophia, Illumina-
New Illuminants in Old Surround-		tion of, by J. B. Fulton 57
ings	668	Church Lighting, by E. G. Perrot 50
Spectacular Lighting in Frankfort	744	Do. (Editorial) 2
Spectacular Effects in Interior	,	Church Cross Lighting 688
Lighting	94	Church Window, Display of 36
CI T. 1. (T3 11, 12)	580	Colliery Illumination by An En-
Stage Lighting (Editorial)	900	gineering Correspondent 689
Arc Lamps-		Barrens
Are Damps—		Colour-
Arc Lights, Nomenclature of Ver-		Colour—
band Deutscher Elektrotech-		Apparatus for Studying Colour of
	630	Artificial Illumination, by
	030	Dr. W. Voege 10
Deposit-Free Globes for Excello	240	Coloured Glass to Simulate Sun-
Lamps 169		
Disc Are Lamp, A	419	ingite, coc or
Modern Arc Lamps, and their Ap-		Colour Sensations, Experiments on
plications, by J. Rosemeyer	15	Growth and Decay in, by An
Kandem Arc Lamp Coupling, The	352	Engineering Correspondent 340

PAG	
Perception of Light and Colour, The, by F. W. Edridge Green	Electric Glow Lamps—
210, 741, 80	An Ingenious Swindle 344
Visual Acuity, Effect of Light of	Candle-power and voltage of Glow
Different Colours on, by J. S.	Lamps, Relation between, by
Dow 23	3 F. E. Cady 61
Visual Acuity and Light of Differ-	Carbon and Metallic Filament
ent Colours (Correspondence),	Lamps, The (Editorial) 147
by Prof. L. Weber 34	Economical Possibilities of Lighting
Do. (Correspondence), by J. S.	by Carbon Filament Lamps, by
Dow 48	8 An Engineering Correspondent 25, 103, 177, 207, 208, 281
Commercial Gas Association (U.S.),	Floatrie Lampa by Maurice Cale
Annual Convention 2	mon (Possions)
Consumer, The, by C. W. Hare 2	Floatrie Lamns for Pailway Signals 606
Do. The Study of (Editorial) 7	Electric Lighting (Cantor Lecture), by
	L. Gaster 16
Correspondence-	Metallic Filament Lamps, The
oorrespondence—	Present State of, by Our
P. J. Waldram 6	D ' C 3 4 200
P. J. Waldram A. J. Marshall, A. A. Voysey, Dr. B. Monasch, Prof. L. Weber,	Do. Prices of 486
B. Monasch, Prof. L. Weber,	Modern Incandescent Lamps and
Sir W. Preece, L. Stokes,	their Production by K.
Dr. B. S., Athos 13	
Dr. W. Voege, C. C. Paterson,	New High - efficiency Nernst
An Engineering Correspon-	Lamp 351
dent 20	
A. J. Marshall, An Engineering	350, 498, 642, 713
Correspondent, M. Solomon 27	7 Tests on Tungsten Lamps 129 Tests on 220-volt Metallic Fila-
Prof. L. Weber, An Engineer-	1 T :
ing Correspondent 34	T T T
G. Marconi, Athos 42	Candle-power of 77
J. S. Dow, Prof. H. Strache, Dr. P. Bellile 48	D 01 1:11: 1
P. Bellile T. H. Glasscoe, J. Williams, F. J.	bor buop inguing by
	Electric Lighting (General)—
Athos 64	7
C. C. Paterson 71	bristoi Lighting Curve, The, by
Dr. L. Bloch, Athos, F. Laporte,	J. D. CIBIRO 10
Prof. A. Blondel 78	Blectric Head Lamps for Chicago Street-Scrapers 108
4	Street-Scrapers 108 Electric Lighting, The Present
D 1144 W 1-1-11	Aspect of, by H. W. Hand-
Daylight Illumination—	cock, and A. H. Dykes 853
A 6TD11 144 W. 4 1-4-	Electric Table Lamp, An 413
Access of Daylight to Westminster	Electrical Table Clath Am 878
Hospital 37	Electricity for Everybody 778
Daylight Conditions, Comparison with Artificial Illumination 30	Commention of Floatminites has Wind
Daylight Illumination, A Standard	power 417
for Interiors, by P. J. Wald-	Leitner System of Train Lighting 423
ram 46	London Electric Supply (Corre-
Do. (Correspondence), by Athos 13	spondence), A. A. Voysey 132
Do. (Correspondence) P. J.	Mercury Vapour Lamps, Method
Waldram 6	
Do. In the House of Commons 2	of the 803
Deutscher Verein von Gas und	Private House Electric Lighting,
Wasserfachmännern, Annual	by F. H. Taylor (Review) 786
Meeting of 32	
Diagnosis under Artificial Light 2	by L. Gaster (Cantor Lecture delivered before the Royal
Editorials-	Safe Electrical Handlamps, &c. 569, 712
Europriais-	"Sparlight" System of Lighting 422
By L. Gaster 1, 73, 145, 217, 289, 361	
433, 505, 577, 649, 721, 793	
,,, ,,	

PAGE	l nom
	Do Water on Faul David
Electrical Trades Benevolent Insti-	Do. Notes on Early Develop-
tution 274	ments of in London, by An
Elliott, Dr. A. H., Visit of 456	Engineering Correspondent
Errata 359	(Dr. B. S.) 316
Eyesight. See Hygienic Aspects of	Do. Recent Advances in 639
Illumination and Ultra-violet Light.	"Hands" Outside Gas Lamp 353
Thumston and Circu croses Bigns.	Heat of Combustion and Illumi
Factory Lighting-	Heat of Combustion and Illumi-
	nating Power of Gases, by
Factory Lighting 323, 466	M. Sainte Claire Deville 451
Do. (Editorial) 434, 723	High Duty Gaslighting, by T. Holgate
Do. By L. B. Marks 752, 845	457, 533, 615
Do. British Legislation on 373	High Pressure Gas Lighting, by
Do. Report on, presented to	Prof. H. Strache 329
Conseil d'Hygiene de la Seine	Illuminating Engineering with Gas 771
229, 319	Incandescent Lighting in Belfast 138
	Incandescent Lighting in Belfast 138 Incandescent Gas Lighting, Some
Machine Shops, Lighting by Flame	incandescent Gas Lighting, Some
Arcs 19	Notes on, by Dr. C. R. Bohm
Report of the Conseil d'Hygiene de	227, 326, 395, 628
la Seine, The (Editorial) 292	Incandescent Mantle and Flame,
S. 128.	Theory of, by W. H. Ful-
Fixtures—	400 550 500 500
	Lecture Theatre Lighted by Gas, A 474
Beautiful Interiors and Appro-	
priate Lighting Fixtures 324	Perfuming Mixed Gases 622
Electric Light Fittings for Ships 350	Recent Progress in Gaslighting, by
Fixtures for Tantalum Lamps 493	L. Gaster (Cantor Lecture de-
Fixtures, Some Practical Points	livered before the Royal Society
in the Design of, by An Engi-	of Arts on Feb. 22nd) 245
	Gold Mirrors for Searchlights 713
	Headlights for Motor Cars, Test of
Gaslighting Fixtures 419	
Gral-Arc Fittings 714	
Holophane Glass, Fittings for 494	Do. for Vehicles, Design of 476
Mission Fixtures 627	Do. (Editorial) 436
New Fixtures in Old Houses-	Do. for Motor Vehicles, Testing of 589
	Houses of Parliament, Lighting of, by
	An Engineering Correspondent 663
Special Electrical Fixtures 780	Hyde, Dr. E. P., Visit of 461
Fused Bifocal Lenses \$. 464	Hyde, Dr. E. I., visit of 401
Con Tighting	
Gas Lighting—	Hygiene and Physiological Aspects of Illu-
Calorific Standard of Gas in	mination, Eyesight, &c.—
London, A 317	, <b>- J</b> - <b>- J</b> - <b>J J</b> - <b>J J</b> - <b>J J</b> - <b>J J</b> - <b>J</b> - <b>J</b> - <b>J</b> - <b>J</b> - <b>J</b> - <b>J</b>
Carbon Monoxide and Hydrogen,	(See also Colour, Factory Lighting, and
Illuminating Efficiencies of,	Ultra-violet Light, &c.)
Indiminating Efficiencies of,	Engine Drivers, Eyesight of 391
by A. Forshaw 539, 669 "Degea" Airostat Inverted	Engine Drivers, Eyesight of 391
"Degea" Airostat Inverted	Eyesight of School Children in
Burner, The 178	London, The 547
Efficiency of High Pressure Gas-	Hospitals, Value of Good Illu-
Lighting (Correspondence),	mination in 311, 709
Athos 424	Municipal and Health Exhibition 860
Do. Prof. H. Strache 489	Physiological Optics, Bearing on
	Modern Illumination, by S.
Free Maintenance of Incandescent	117 A.1.
Burners 607	
Gas, Sale of, during Depression, by A. F. Willard 115	Sunstroke, Prevention of 542
by A. F. Willard 115	
Gas Sales in Small Towns, Methods	Illumination; Illuminating Engineering-
of Increasing, by C. R.	
Trumbull 31	A List of Works on Illumination
Gas Industry, Progress of the, by	(Editorial) 364
A. Cressy Morrison 120	A Year's Progress in Illuminating
	Engineering (Editorial) 290
Gaslighter, a New Type of 780	
Gaslighting, Developments in	Central Station Illuminating En-
Gaslighting, Developments in Berlin, by An Engineering	gineering Department, A 123
Correspondent 743	Co-operation between Competitors 332
Do. in Birmingham, Examples	Education, Need for Good Illu-
of 522	mination in 82
V1	

PAGE	3lluminating Engineering Society
Education from the Standpoint of	(FOUNDED IN LONDON, 1909).—
Illuminating Engineering, by F. K. Richtmyer 851	PAGE
General Interest in Illumination,	British Illuminating Engineering
The (Editorial) 218	Society, A 343
Illuminants and Illuminating En-	Formation of the Illuminating
gineering (Editorial) 217	Engineering Society, The (Editorial) 145
Illumination and Accidents 185 Do. and Imagination, by An	The Illuminating Engineering
Engineering Correspondent 635	Society (Editorial) 290
Do. and Visual Acuity (Editorial) 219	Illuminating Engineering Society,
Do. Ancient Method of 525	General Meeting on May 25th,
Do. At the Royal Institution 298	1909 375 Do. Special Notices
Do. and Scenic Effects 608 Do. in the Middle Ages, &c.,	328, 448, 812, 828, 837
Do. in the Middle Ages, &c., by E. L. von Benesch 600	Do. Formation of the, Proceed-
Illumination, its Distribution and	ings at Dinner held on
Measurement, by A. P. Trotter	Feb. 9th, 1909 154
7, 79, 151, 223, 295, 367, 439, 511,	Do. Inaugural Meeting, Nov. 18th, 1909 807
583, 655, 727, 799	Nov. 18th, 1909 807 Do. (Editorial) 793
Do. of Palace at Buda Pesth,	Do. Congratulations on Forma-
by Our Correspondent in	tion of 811
Buda-Pesth 383	Do. Inaugural Address of Prof.
Illumination of Statues 607	S. P. Thompson 813 Do. List of Members 829
Illuminating Engineer, The (Edi-	D D + CO :1 00F
torial)	Do. Report of Council 825 Do. President and Vice-Presidents
New Home of the 518	&c 662
Instruction in Illuminating En-	Do. New Vice-Presidents and
gineering 468	Corresponding Members 730
Illuminating Engineering, Ideals and the Truth 435	Do. Constitution and Bye-laws 377
and the Truth 435  Do. Qualifications (Correspond-	Do. Progress of the (Editorial) 363,577
ence), A. J. Marshall 131	ILLUMINATING ENGINEERING SOCIETY.
Do. and Ophthalmology 852	(U.S.). Illuminating Engineering Society
Do. Light Conversations on.	(U.S.), Annual Meeting 108, 225
No. 1—"Glare," Athos 765	Do. Third Annual Convention of
Do. Popular interest in 762 Misleading Statements on Light-	622, 747
ing (Editorial) 75	Do. (Editorial) 649, 721
Modern Methods of Illumination, by	Do. Representative Membership
L. Gaster (Cantor Lectures	
delivered before the Royal	Indirect Lighting —
Society of Arts, Feb. 15, 22,	Ballroom Lighted by Inverted
March 1, 8, 1909) 161, 245, 301	Fixtures, A 764
Modern Methods of Illumination,	Direct and Indirect Illumination (Editorial) 75
by L. Gaster (Lecture de-	Indirect Lighting with Metallic
livered at the London Insti-	Filament Lamps 642
tution on Nov. 22nd) 843	Inverted Lighting by Osram
New Illuminants and the Illamin- ating Engineer (Editorial) 73	Lamps 184
Press and the Illuminating Engin-	Indirect Illumination, by A. D. Curtis and A. J. Morgan 199
eering Society, The (Editorial) 505	Installation Work, Structural Diffi-
Simple Methods in Illuminating	culties in, by J. R. Strong 8
Engineering, by A. A. Woh-	Institution of Gas Engineers, Annual
The Old Need on Independent	Meeting (Editorial) 434, 454
The Old Need, an Independent Expert (Editorial) 76	International Congress of Applied
Union of those engaged in the	Chemistry 430 International Press Conference, The
Illumination Industry 86	(Editorial) 650
Wideness of the Field of Illuminating	Intrinsic Brilliancy of Illuminants.
Engineering, The 28	302, 398, 548

PAGE	PAGE
Iron and Steel Institute, Annual	Petroleum, Flash Point and
Meeting 718	Qualities as Illuminants, by
Do. Carnegie Research Scholarship	Dr. C. Charitschkoff 694
128, 806	Petroleum, Purification of, for
Library Lighting (Editorial) 794	Lighting Purposes 761
Light in Custom and Superstition, by	Outdoor Areas, Illumination of 318
Dr. M. Gaster 660, 731, 804	Outlets in Interiors, Spacing of 483
Light in Worship, by Dr. M. Gaster 520, 586	Palace at Budapesth, Illumination of 383
	Detents
Light Scattered by Rough Surfaces,	Patents —
Study of, by Professor W.	71, 143, 215, 287, 360, 431, 503, 576,
Barret 776	647, 720, 791, 864
Light Symbols on Dark Backgrounds,	Petrol-Air Lighting
by A. J. Marshall 406	
Livesey, Sir George, Memorial to (Editorial) 1, 60, 82	A New Development in Petrol-Air
(Editorial) 1, 60, 82 Machine Shops, Lighting of, by	Gas Lighting 138
Flame Arcs 19	Efficiency of Petrol Air Gas Plants,
Masonic Temple, Illumination of 465	The, by T. H. Glasscos, J.
	Williams, F. J. Cox, C. Hoddle
Modern Methods of Illumination (Can-	549, 561
tor Lectures delivered before	Oil, Acetylene, Petrol-Air, and other
the Royal Society of Arts) by	Methods of Lighting, by L.
L. Gaster.	Gaster (Cantor Lecture delivered
Syllabus 161	before the Royal Society of
I. Electric Lighting 162	Arts, March 1st, 1909) 259
II. Gas Lighting 245	Petrol-Air Gas, by H. O'Connor
III. Oil, Acetylene Petrol-Air, Gas, and other Systems of	(Review) 431
Gas, and other Systems of	Photometers —
Lighting 259	
IV. General Problems in Illumin-	Blondel-Krüss Integrating Photo-
ation 301	meter, by Prof. A. Blondel
Modern Methods of Illumination, by	(Correspondence) 785
L. Gaster (Lecture delivered at the London Institution, Nov.	Brodhun Street Photometer 697
22nd, 1909) 785, 843	Conroy Photometer 81
36 4 - C.1. T 6 100	Flicker Photometer, Theory of,
Motor Coh Lighting	by J. S. Dow 802
Municipal Interest in Illumination 362	Do. and Testing Tungsten Lamps, by J. S. Dow 610
Munich Museum, Technical Guides	by J. S. Dow 610 Illumination Photometers
at 659	309, 655, 727, 799
National Commercial Gas Association,	Integrating Photometer, New
Annual Convention 29	Form of, by Dr. H. Krüss 710
Northampton Institute, Annual	Joly Photometer 583
Prize Distribution 216	Lummer-Brodhun Photometer 151
A. U	Martens Photometers 309, 696, 698
Obituary Notices—	Perforated Screen Photometer 369
Mr. C. J. Robertson 777	Portable Photometers 498, 858
Major E. L. Zalinski 286	Ritchie Photometer 7, 79
1 4 4	Shadow-Photometer, A New Form
Oil Lighting—	of 127
International Potroloum Congress	Thompson & Starling Photometer 81
International Petroleum Congress 394, 453	"Slot" and "Grid" Photometers 442
Meteor, a New Variety of Petro-	Weber Photometer 696
leum for Illumination Pur-	The demodern
poses, by Dr. C. Charitschkoff 299	Photometry—
	Angle-Errors 439
Oil, Acetylene, Petrol-Air Gas, and	Bars and Scales, The Construction
other Systems of Lighting (Can-	of 223, 368
tor Lecture delivered before the	Laboratory of the National Elec-
Royal Society of Arts, March 1st) 259	trie Lamps Association, by
Petroleum for Incandescent Light-	Dr. E. P. Hyde 758
ing, Tests on, by Dr. C.	Lighting of Photometrical Labora-
Charitschkoff, 401	tories 153

PAGE	PAGE
Mirrors in Photometry, Use of, by L. Wild 193	Reflectors, Use of, for Modifying Intensity of Illumination, by
Modern Photometry, by Prof. H.	E. W. Weinbeer 89
Strache 695	Shades and Reflectors 303
National Physical Laboratory,	Shading, The Art of, by J. Darch
Photometry at the 226	83, 173
Photometer Scales 223, 295	Art of Shading, The (Editorial) 148
Photometric Screens 513	Silk Shades in Interiors, Use of 473
Rotating Sectors 585 Simple Explanation and Calcula-	Reflecting Power of Surroundings. 404
tion of Photometrical Terms,	Review of Books, 359, 431, 503, 575, 786
by Dr. L. Bloch 516, 682	Review of Contents, 5, 77, 149, 221, 293,
Study of Photometry, The (Edi-	365, 437, 509, 581, 653, 725, 797
torial) 795	Review of the Technical Press, 67, 139,
Ventilation of Photometer Rooms 203	211, 283, 355, 427, 499, 571, 643, 715,
Vienna Central Testing Institution,	787, 861
The (Editorial) 651	Royal Institution, Some Exhibits
Poor Law Institution, Lighting of	dealing with Illumination 298
(Editorial) 363	Royal Society, Exhibits at Conver-
Porch Lighting, by An Engineering	Sale of Light, The 415
Correspondent 405	The (Editorial) 700
Physiological Aspects of Illumination	Sand Blast Analogy of the Distribu-
(See Hygienic Aspects, Colour,	tion of Light, The (Correspon-
and Ultra-Violet Light.)	dence), Athos 647
Publications Received, 64, 144, 216, 353,	Do. by Dr. L. Bloch 783
425, 491, 568, 648, 707, 792, 860	School Illumination 309, 742
Radiation, &c., and Light Production-	Schools, Lighting of 450 Science and Scientific Methods (Value
	of (Editorial) 505
"Black Surfaces" and the Measure-	Shaving Mirror and Lamp Combined 859
ment of Radiation 708	Shop Lighting, Psychology of 762
Efficiency of Incandescent Illuminants, The (Editorial) 508	1
Mechanical Equivalent of Light,	Sign Lighting—
The, by J. S. Dow 129	An Interesting New Trees of Ille
Metallic Filaments, Luminous Effi-	An Interesting New Type of Illuminated Sign 850
ciency of, by W. W. Coblentz 557	Gas Illuminated Concrete Signs 744
Phosphorescence and Luminescence,	Five-watt four-candle-power Sign
by Dr. E. L. Nichols 711	Lamps 391
Phosphorescent Source of Light,	Illuminated Signs, Devices for 414
A 775	Light as a Means of Attracting
Production and Utilization of Light,	Attention 668
by Dr. C. Y. Drysdale 20, 101, 230	Revolving Illuminated Signs 114
Selective Radiation of Filaments,	Stage Lighting (Editorial) 580
by Dr. E. P. Hyde, F. E.	
Cady, and G. W. Middlekauff	Street Lighting—
241, 335, 389	Berlin, Extension of Electrical
Selective Radiation of Metals, by	Street Lighting 733
W. W. Coblentz 839	Boston, Public Lighting in
Radium, Manufacture in GreatBritain 730	402, 481, 529
Beforetone Chades and Clahes	Fleet Street, Lighting of 402
Reflectors, Shades, and Globes	Historical Development of Street
Absorption of Globes 442	Lighting in London during
Deposit Free Globes for Excello	the 17th and 18th Centuries
Arc Lamps	87, 272
Dioptic Arc Lamp Globe, The 169, 570	Law of Public Lighting, The 482
Fantastic Lamp Shades, &c 498	Local Government Board and
Holophane Scientific Glassware	Street Lighting 733
and Fittings 494, 856	Do. (Editorial) 579
Holophane Tungsten Units, Illu-	Municipal Interest in Illumination (Editorial)
Patent on Scientific Glassware,	(Editorial)
Designer	Tungsten Lamps 110
Decision 803	Lungovon Damps 110

T.O.	PAGE
PAGE	International Unit of Light, Sub-
Street Lighting Fixtures, by. H. T. Owens	Committe of International
	Electro-Technical Commission
Street Lighting Improvement Club, A	for consideration of 226
Club, A 183	International Unit of Light, The,
Street Lighting Depart of the Donn.	
Street Lighting, Report of the Depu-	by C. C. Paterson 443 . Communication from Bureau
tation of the City of London on	
526, 623, 677	of Standards 445 International Unit of Light, The
Streets of London, The Lighting	Proposed (Editorial) 361
of the (Editorial) 506, 578	International Electrotechnical
Suspended Incandescent Gas	
Lamps for Street Lighting. 639	Commission Report on Inter- national Unit of Light 392
Tax on Light in Germany 23, 508	International Unit of Light 392
Tax on Light in Germany Rejected,	
The 339	randum from National Physi- cal Laboratory Regarding 393
Theatres, Fires in, and Electrical	cal Laboratory Regarding
Installations, by Our Special	Do. (Editorial) 435 International Candle, Name Wanted
Correspondent in Budapest 97	for, by Prof. A. Blondel 524
Thwaite, Mrs. B. H., and Children,	101, 0, 11011 111
Fund on Behalf of 72, 130	International Unit of Light, Name
Trade Notes, 72, 144, 216, 288, 349, 417,	for (Correspondence), by F.
493, 569, 639, 712, 778, 856	Laporte, Athos, and Prof. A. Blondel 783
7714 Y71-3 4 Y 1-4 4	D GGD.
Ultra-Yiolet Light—	
Ultra-Violet Light, Detection of 546	Lux or Meterkerze, by Prof. L. Weber 65, 134
Do. Protection of Eyes from, by	
Dr. W. Voege 543	Do. (Correspondence) by Dr. B. Monasch
Ultra-Violet Rays and Disease 838	Do. do. by Sir Wm. Preece 134
Ultra-Violet Light, Effects of	Relation Between Units of Illu-
(Correspondence), by Dr. W.	mination in Different Coun-
Voege 205	tries, by Dr. B. Monasch 742
Ultra-Violet in Solar Spectrum,	Standardization, by H. Adams 746
Extent of 491	Standard Specification in the
Ultra-Violet Light, Effects of 312	14th Century, A 734
Wireless Telegraphy Operators,	Do. for Wax Candles in the 14th
Eyesight of, by Dr. P.	Century (Editorial) 724
Bellile 278	Standard Specification for Illu-
Do. Editorial 291	minating Apparatus, Need for 843
Do. (Correspondence), by Dr. P.	Unit of Light in the United States 9
Bellife 490	Verband Deutscher Elektrotechniker.
Do. (Correspondence) by G.	Annual Meeting of 315
Marconi 425	Watches, Apparatus for Illuminating 398
	White House, Washington, Illumin-
Units of Light and Standardisation-	ation of 680
	Worship of Light, The, by Dr. M.
International Unit of Light, The	Gaster 371, 462
(Editorial) 220	3/1, 402

1.7 THE ... 137 .....

